

Kolb et al.

S/N: 10/604,593

In the Specification

Please amend paragraph [0026] as follows:

As stated above, when zero or little current is induced in the single coil of wire wrapped around the bobbin, the solenoid is considered to be in a de-energized state or position. In this position, the polarity of the armature takes on the polarity of the permanent magnet. The permanent magnet creates an attractive force between the armature and itself. The force of the magnet coupled with the bias of the return spring create the relatively large holding force on the armature 44 that, as illustrated in Fig. 2, maintains a seating of the armature end 48 against the device or equipment in which the armature is engaged. As such, current in the single coil is not needed to maintain the armature in an at-rest state or position.

Please amend paragraph [0027] as follows:

Referring now to Fig. 3, solenoid 32 is shown in an energized position. In this regard, current is induced in coil 36. The polarity of the coil must be such that the shunt components 40 have the same polarity as the permanent magnet face that is in close proximity or in contact with the armature. The induction of current through coil 36 causes the polarity of armature 44 with respect to the magnet to be the same. As such, a repellent force is created between the armature 44 and permanent magnet 38. Further, upon current induction in coil 36, the polarity of the armature at the poles proximate to the attracting stud 56 is also reversed thereby creating an attractive force between attracting stud 56 and armature 44. When the current induced in single coil 36 is of sufficient amplitude, the attractive force created between attracting stud 56 and armature 44 coupled with the repellent force created between armature 44 and permanent magnet 38 will be sufficient to overcome the bias of spring 46 thereby causing a linear movement of armature 44 in the bore of bobbin 34 toward end plate 54. As such, the return spring 46 is compressed and engaged such that armature end 48 of armature 44 is pulled from the device or equipment that in which it was engaged during the non-energization of the coil.